

CLAIMS

1. An oil squirter rail for lubricating or cooling multiple cylinders or pistons of an internal combustion engine having a crankcase positioned below the cylinders, the pistons being reciprocable in the cylinders and the oil squirter rail comprising:
5 an assembly adapted to be mounted within the crankcase and including a longitudinal tube and a plurality of laterally-extending longitudinally-spaced nozzles permanently fixed to the tube and configured to direct oil from the tube against the cylinders or pistons when installed in an associated engine.
2. An oil squirter rail as in claim 1 including a plurality of attachments for securing the rail within an engine crankcase.
3. An oil squirter rail as in claim 2 wherein the attachments connect the oil squirter rail to bearing caps of the engine.
4. An oil squirter rail as in claim 2 wherein the attachments connect the oil squirter rail to bearing cap studs of the engine.
5. An oil squirter rail as in claim 2 wherein the attachments connect the oil squirter rail to interior walls of the crankcase.
6. An oil squirter system adapted for lubricating or cooling multiple cylinders or pistons of an internal combustion engine, the engine including a crankcase positioned below the cylinders and the pistons being reciprocable in the cylinders, the oil system comprising:
5 a first oil squirter rail mounted within the crankcase and including a longitudinal tube and a plurality of laterally-extending longitudinally-

spaced nozzles permanently fixed to the tube and configured to deliver oil from the tube against the cylinders or pistons when installed in an associated engine.

7. An oil squirter rail as in claim 6 including a plurality of attachments securing the rail within an engine crankcase.

8. An oil squirter rail as in claim 7 wherein the attachments connect the oil squirter rail to bearing caps of the engine.

9. An oil squirter rail as in claim 7 wherein the attachments connect the oil squirter rail to bearing cap studs of the engine.

10. An oil squirter rail as in claim 7 wherein the attachments connect the oil squirter rail to interior walls of the crankcase.

11. A system as in claim 6 including:

a second oil squirter rail mounted within the crankcase and configured to deliver oil from the manifold against additional cylinders or pistons of the engine; and

5 an oil supply manifold communicating the rails with an inlet fitting adapted for receiving oil from an oil pressure source for delivery through the manifold to the squirter rails.

12. A system as in claim 11 wherein the engine has two cylinder banks and each of the cylinder rails is positioned to direct oil to the cylinders or pistons of an associated one of the cylinder banks.

13. A system as in claim 6 including a flow control valve positioned to regulate oil flow through the system.

14. An oil squirter system as in claim 13 wherein the flow control valve is a solenoid valve operable to selectively control oil flow through the system.

15. An oil squirter system as in claim 14 wherein a control module actuates the solenoid valve to close or open the system to oil flow.

16. An oil squirter system as in claim 15 wherein the control module actuates the solenoid valve to open system oil flow during engine startup for initially lubricating the cylinders.

17. An oil squirter system as in claim 14 wherein the control module actuates the solenoid valve to stop piston cooling oil flow at low engine speeds and open piston cooling oil flow at higher engine speeds.

18. An oil squirter system as in claim 13 wherein the flow control valve is a mechanical valve.

19. An oil squirter system as in claim 18 wherein the mechanical valve shuts off piston cooling oil flow at low engine speeds and opens piston cooling oil flow at higher engine speeds.